AZ821/AZ831

SUBMINIATURE DIP RELAY

FEATURES

- Low profile for compact board spacing
- DC coils to 48 VDC
- Single button crossbar contacts
- High sensitivity, 100 mW pickup
- Life expectancy to 15 million operations
- High switching capacity, 125 W, 120 VA
- Fits standard 16 pin IC socket
- Epoxy sealed for automatic wave soldering and cleaning
- Meets FCC Part 68.302 1500 V lightning surge
- Meets FCC Part 68.304 1000 V dielectric
- UL, CUR file E43203 CSA LR 701392

CONTACTS

Arrangement	DPDT (2 Form C)
Ratings	Resistive load: Max. switched power: 125 W or 120 VA Max. switched current: 2 A Max. switched voltage: 150 VDC or 240 VAC
Rated Load **UL** **CSA**	 1.25 A at 100 VDC, 125 W 0.5 A at 125 VAC 1.25 A at 150 VAC, 150 VDC
Material	Silver alloy, gold plated
Resistance	< 50 milliohms initially 200 milliohms at end of life

COIL

Power **At Pickup Voltage (typical)**	 AZ821: 250 mW AZ831: 100 mW
Max. Continuous Dissipation	1.7 W at 20°C (68°F) 1.3 W at 40°C (104°F)
Temperature Rise	AZ821: 37°C (67°F) at nominal coil voltage AZ831: 18°C (32°F) at nominal coil voltage
Temperature	Max. 115°C (239°F)

NOTES

1. All values at 20°C (68°F).
2. Relay may pull in with less than “Must Operate” value.
3. Other coil resistances and sensitivities available upon request.
4. Specifications subject to change without notice.

GENERAL DATA

Life Expectancy **Mechanical** **Electrical**	Minimum operations 15 x 10^6 1 x 10^5 at 2 A 30 VDC
Operate Time (typical)	3 ms at nominal coil voltage
Release Time (typical)	2 ms at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	1500 Vrms coil to contact 1000 Vrms contact to contact
Insulation Resistance	1000 megohms min. at 20°C, 500 VDC, 50% RH
Dropout	Greater than 10% of nominal coil voltage
Capacitance	Contact to contact: 2.0 pF Contact set to contact set: 1.5 pF Contact to coil: 5.0 pF
Ambient Temperature **Operating** **Storage**	At nominal coil voltage AZ821: -40°C (-40°F) to 75°C (167°F) AZ831: -40°C (-40°F) to 95°C (203°F) -40°C (-40°F) to 115°C (239°F)
Vibration	1.5 mm DA at 10–55 Hz
Shock	40 g 11 ms 1/2 sine
Enclosure	P.B.T. polyester 94 V-O
Terminals	Tinned copper alloy
Max. Solder Temp.	270°C (518°F)
Max. Solder Time	5 seconds
Max. Solvent Temp.	80°C (176°F)
Max. Immersion Time	30 seconds
Weight	6 grams

AMERICAN ZETTLER, INC.

75 COLUMBIA • ALISO VIEJO, CA 92656 • PHONE: (714) 831-5000 • FAX: (714) 831-8642 • E-MAIL: SALES@AZETTLER.COM

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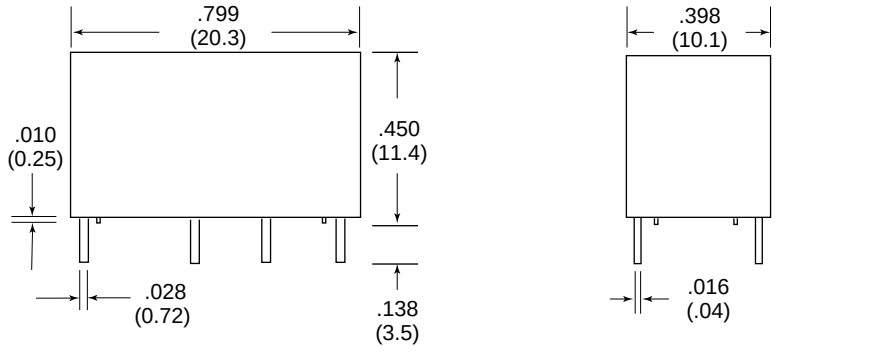
AZ821/AZ831

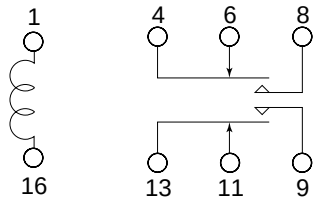
RELAY ORDERING DATA

STANDARD COIL SPECIFICATIONS				ORDER NUMBER
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance ± 10%	Must Operate VDC	
5	7.8	36	3.5	AZ821–2C–5DE
6	10.9	70	4.2	AZ821–2C–6DE
9	15.4	140	6.3	AZ821–2C–9DE
12	21.8	280	8.4	AZ821–2C–12DE
24	42.2	1050	16.8	AZ821–2C–24DE
48	82.5	4000	33.6	AZ821–2C–48DE
SENSITIVE COIL SPECIFICATIONS				**ORDER NUMBER**
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance ± 10%	Must Operate VDC	
5	14.6	125	3.5	AZ831–2C–5DSE
6	17.5	180	4.2	AZ831–2C–6DSE
9	26.2	405	6.3	AZ831–2C–9DSE
12	35.0	720	8.4	AZ831–2C–12DSE
24	70.0	2,880	16.8	AZ831–2C–24DSE
48	140.0	11,520	33.6	AZ831–2C–48DSE

MECHANICAL DATA

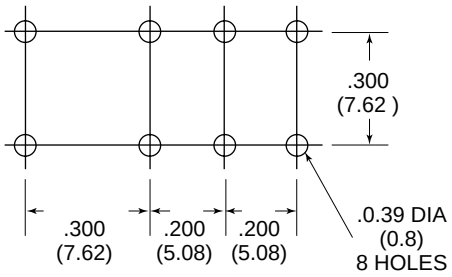


WIRING DIAGRAM



Viewed toward terminals

PC BOARD LAYOUT



Viewed toward terminals

Dimensions in inches with metric equivalents in parentheses. Tolerance: ± .010"

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